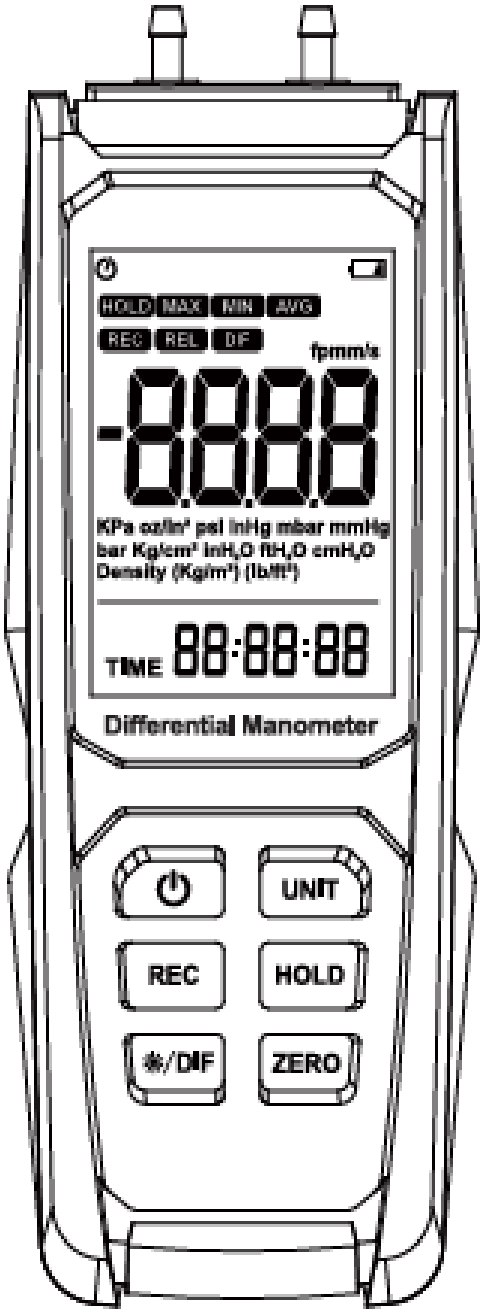
USERS MANUAL

Differential Manometer



⚠ Before using the instrument,please read this manual carefully,and save it well for future using.

I.Description

This is an industrial-grade portable differential pressure gauge, capable of accurately measuring differential, positive and negative pressure. It features one-click switching across more than ten internationally standardized pressure units and comes with a standard hose connection kit for rapid on-site setup. With easy operation, a clear digital display and stable performance, it is ideal for HVAC system commissioning, clean room differential pressure monitoring, and the operation & maintenance of various gas pressure systems. It is an essential high-precision measuring tool for industrial technicians, metrology professionals and research staff.

II.Safety Instructions

For personal safety and optimal equipment performance, adhere to the following safety guidelines prior to operation:

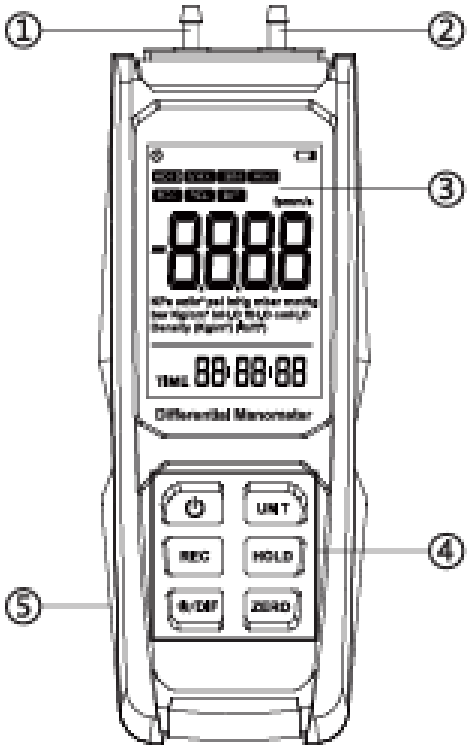
· Inspect the main unit and all accessories thoroughly before use to ensure no physical damage or functional malfunctions. Do not operate the gauge if the housing is damaged or the device fails to function properly.

· Do not disassemble the gauge housing or modify internal circuits and components without authorization, as this may cause permanent damage and inaccurate measurements.

· Do not use or store the gauge in environments with high temperature, high humidity, flammable/explosive hazards, strong corrosion or intense electromagnetic interference.

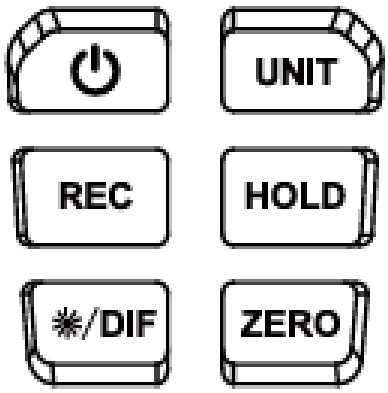
· Clean the gauge only with a clean soft cloth and neutral detergent. Do not use abrasives, organic solvents or corrosive cleaners, to prevent damage to the housing and internal components.

III.Instrument Components



Symbol	Description
①	Positive Pressure Port
②	Negative Pressure Port
③	Display Screen
④	Function Buttons
⑤	Battery Compartment

IV.Button Descriptions



Symbol	Description
⏻	Power On/Off
REC	Record
✳/DIF	Backlight On&Off / Differential Mode
UNIT	Unit Selection
HOLD	Data Hold
ZERO	Zero Calibration

V.Display Indicators



Symbol	Description
	Auto Power Off Indicator
	Low Battery Indicator
HOLD	Data Hold
MAX	Maximum Value Hold
MIN	Minimum Value Hold
AVG	Average Value
REC	Record Mode
DIF	Differential Mode
KPa	Kilopascal
oz/in²	Ounce per Square Inch
psi	Pound per Square Inch
inHg	Inch of Mercury
mbar	Millibar
mmHg	Millimeter of Mercury
bar	Bar
Kg/cm²	Kilogram per Square Centimeter
inH_2O	Inch of Water Column
ftH_2O	Foot of Water Column
cmH_2O	Centimeter of Water Column
TIME	Time Display

VI.Technical Specifications

Parameter	Specification		
Operating Altitude	Max 2000m		
Display	LCD		
Operating Current	3mA Typical		
Overrange Indication	OL or -OL		
Sampling Rate	0.5 s Typical		
Auto Power Off	30 Mins Typical		
Measuring Range	☐A ±3.45KPa	☐B ±39.99KPa	☐C ±103.42KPa
Max Working Pressure	☐A 6.89KPa	☐B 79.90KPa	☐C 206.70KPa
Accuracy	±1%FS		
Operating Temp & Humidity	0°C～50°C（32°F～122°F）/10%～80%RH		
Storage Temp & Humidity	-10°C～60°C（14°F～140°F）/10%～90%RH		
Power Supply	3x1.5V AAA Batteries		
Dimensions	180mm×62mm×33mm		
Weight	180 g Typical (Batteries Excluded)		

VII.Operation Instructions

(1)Power: Press and hold " ⏻ " to turn on; press briefly to turn off.

(2)Auto Power Off: The gauge automatically powers off after 30 minutes of inactivity to conserve battery life.

(3)Disable Auto Power Off: With the gauge off, press and hold UNIT and " ⏻ " simultaneously until " ⏻ " disappears. The auto power off function resumes after manual shutdown.

(4)Unit Selection: Press "UNIT" briefly to cycle through KPa, oz/in², psi, inHg, mbar, mmHg, bar, kg/cm² , inH_2O, ftH_2O, cmH_2O; select the unit required for measurement.

(5)Data Hold: Press "HOLD" briefly to lock the current measurement; press again to release the hold.

(6)Record Mode: Press "REC" briefly to activate time record mode (real-time display only, no data storage). Press "REC" again to cycle through current, MAX, MIN and AVG values for the recording period, with the corresponding timestamp displayed for each value. Press and hold "REC" for 2 seconds to exit record mode.

(7)Backlight: Press " ☀ " briefly to turn the backlight on/off; the backlight is auto-off after 5 minutes.

(8)Diff Mode: Press and hold "DIF" for 2 seconds to activate; the screen displays the difference between the current real-time pressure and the

reference pressure at the time of activation. Press and hold "DIF" for another 2 seconds to exit.

(9)Zero Calibration: For optimal accuracy, perform zero calibration when the gauge is on and no differential pressure is applied. Press "ZERO" briefly; the screen displays "— — — —"during calibration, and the gauge is ready for normal operation once complete.

VIII.Performance Ratings

☐A

Unit	Range	Resolution
KPa	±3.45	0.01
oz/in²	±8.00	0.01
psi	±0.500	0.001
inHg	±1.018	0.001
mbar	±34.5	0.1
mmHg	±25.9	0.1
bar	±0.034	0.001
kg/cm²	±0.035	0.001
inH_2O	±13.84	0.01
ftH_2O	±1.153	0.001
cmH_2O	±35.2	0.1

☐B

Unit	Range	Resolution
KPa	±39.99	0.01
oz/in²	±92.801	0.01
psi	±5.800	0.001
inHg	±11.809	0.001
mbar	±399.9	0.1
mmHg	±300.0	0.1
bar	±0.399	0.001
kg/cm²	±0.408	0.001
inH_2O	±160.55	0.01
ftH_2O	±13.378	0.001
cmH_2O	±407.8	0.1

□C

Unit	Range	Resolution
KPa	±103.42	0.01
oz/in²	±240.00	0.01
psi	±15.000	0.001
inHg	±30.540	0.001
mbar	±1034.2	0.1
mmHg	±775.7	0.1
bar	±1.034	0.001
kg/cm²	±1.055	0.001
inH_2O	±415.20	0.01
ftH_2O	±34.600	0.001
cmH_2O	±1054.6	0.1

IX.Battery Replacement

① Turn off the gauge.

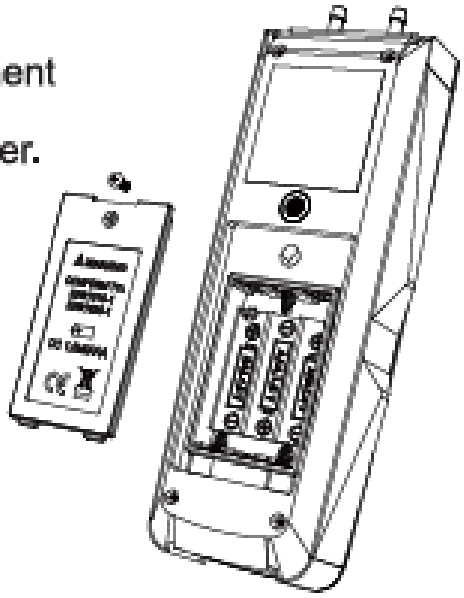
② Remove the screws of the battery compartment cover on the rear of the gauge with a screwdriver.

③ Remove the battery compartment cover.

④ Remove the old batteries.

⑤ Install 3 new 1.5V AAA batteries

⑥ Replace the battery compartment cover and tighten the screws securely.



X.Standard Accessories

Digital Differential Pressure Gauge	×1
User Manual	×1
1.5V AAA Batteries	×3
Carrying Pouch	×1

USERS MANUAL

Made in China

CE RoHS

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